

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

KAIST IP US LLC,	§	
	§	
Plaintiff,	§	
	§	
v.	§	No. 2:16-CV-01314-JRG-RSP
	§	
SAMSUNG ELECTRONICS CO.,	§	
LTD., et al.,	§	
	§	
Defendants.	§	

**MEMORANDUM OPINION AND ORDER**

In this patent case, KAIST moves for leave to amend its infringement contentions to add over 100 allegedly infringing instrumentalities. Pl.’s Mot. for Leave to Amend Infringement Disclosures [Dkt. # 192] at 9–13; *see also* Pl.’s Supp. Disclosure of Asserted Cl. & Infringement Contentions [Dkt. # 192-3] (redlining changes relative to KAIST’s original contentions). KAIST also seeks leave to now assert the doctrine of equivalents with respect to two claim limitations based on recent testimony by a Globalfoundries Rule 30(b)(6) witness. Pl.’s Mot. for Leave [Dkt. # 192] at 13–15. The Court will **GRANT** the motion.

**I. BACKGROUND**

KAIST asserts U.S. Patent 6,885,055, which relates generally to semiconductor manufacturing techniques for field effect transistors (FETs). ’055 Patent abst. More particularly, the ’055 Patent relates to the formation of a fin field effect transistor, also

called a FinFET. *Id.*

In March 2017, KAIST served its preliminary infringement contentions identifying, as allegedly infringing instrumentalities, “Samsung’s bulk FinFET technologies, such as its 14 nm FinFET technologies[,] processor chips that are manufactured using Samsung FinFET Technology . . . , such as Defendant Samsung’s Exynos series of chips . . .”, and “processor chips manufactured using Globalfoundries’ FinFET Technologies.” KAIST’s Infringement Contentions [Dkt. # 144-7] at 3–4. KAIST identified 16 allegedly infringing chips by name, *id.* at 3, but only charted the Exynos 7 Octa 7420, contending it was representative of all infringing instrumentalities, *id.* at 4.

In August 2017, KAIST asked Defendants for their non-infringement positions. *See* Defs.’ Objs. & Resps. to Pl.’s First Set of Common Interrogs. [Dkt. # 83-1] at 2. After objecting to the interrogatory as premature because the Court had not construed the disputed claim terms, *id.* at 7, Defendants responded generally that the accused instrumentalities do not satisfy the all-elements rule, *id.* at 8. KAIST moved to compel based on lack of specificity, KAIST’s Mot. to Compel Discovery Resps. [Dkt. # 83], but the Court denied the motion and noted “answers to such interrogatories are best left until the close of discovery.” Order [Dkt. # 139].

In September 2017, KAIST asked each Defendant to

[i]dentify by product name, product number, and internal name or designation, each Infringing Instrumentality made, used, offered for sale, or imported by You into the United States. To the extent the Infringing Instrumentality is an integrated circuit that is part of a larger product, such as a phone, tablet, or computer, provide the requested identification information

for both the integrated circuit and the larger product.

KAIST's 2d Set of Common Interrs. [Dkt. # 144-9] at 8–9. Defendants responded by “referring Plaintiff to [Samsung's] prior production of relevant, non-privileged documents, including at least production numbers SAM\_KAISTIP00000277–00011248. Samsung Defs.' Objs. & Resps. to Pl.'s 2d Set of Common Interrogs. (Oct. 19, 2017) [Dkt. # 144-10] at 12.

In November 2017, KAIST proposed to supplement its infringement contentions by identifying additional chip models it believed to contain the infringing FinFET device based on Defendants' interrogatory responses and other discovery. Defendants, however, preemptively moved to strike KAIST's proposed supplement. *See* Defs.' Mot. to Enforce the Patent Rules [Dkt. # 120]. In KAIST's opposition to that motion, it moved for leave to amend its contentions. KAIST's Opp'n to Defs.' Mot. to Enforce the Patent Rules [Dkt. # 144] at 15. The Court carried Defendants' motion, which remains pending, and ordered KAIST to move for leave to amend its contentions within two weeks of the Court's claim construction order. Order Regarding Jan. 11, 2018 Mots. H'rg [Dkt. # 170] at 2.

The same month, Defendants' witness Dongwon Kim testified that two limitations of the claims are not literally met: (1) the requirement that the Fin active region be “wall-shaped,” *see, e.g.,* '055 Patent at 12:4, and (2) the requirement of a first oxide layer on the upper surface of the Fin active region with a thickness greater or equal to that of the gate oxide, *see, e.g., id.* at 12:13–15. *See* Kim Dep. (Nov. 15, 2017) [Dkt. # 230-3] at 81:25–82:8. On November 28—before the Court decided KAIST's then-pending motion to

compel—Defendants supplemented their response to Interrogatory No. 1 to reference Dongwon Kim’s deposition testimony. KAIST later acknowledged Defendants’ position. Letter From Andrew Choung to Allan Soobert (Dec. 1, 2017) [Dkt. # 230-4] (“From what we can glean from the cited testimony, Defendants appear to contend that the claim elements of Fin active region, wall-shape, self-aligned manner, and first oxide layer are not met.”).

In January 2018, KAIST elicited more testimony from Globalfoundries that it believes the two limitations are not literally met. A Rule 30(b)(6) witness testified the fin is not wall-shaped because the accused FinFETs have a curvature and tapered sides. Pl.’s Motion [Dkt. # 192] at 7 (citing Samavedam Dep. at 150:8–151:14). The same witness testified the thickness of the dielectric at the tip of the fin is thinner than on the sides. *Id.* at 6 (citing Samavedam Dep. at 238:11–239:12).

KAIST’s motion for leave has two parts. First, KAIST asks for leave to amend its contentions to add over 100 new products relative to its preliminary infringement contentions, about 60 of which were already identified in its proposed supplemental contentions. Pl.’s Motion [Dkt. # 192] at 9–13. KAIST contends the addition of these products is simply ministerial and does not alter the scope of its contentions. *Id.* at 6. Second, KAIST asks for leave to assert the doctrine of equivalents with respect to the two claim limitations noted *supra*. Pl.’s Motion [Dkt. # 192] at 8–9. KAIST alleges its DOE amendments are necessitated by Globalfoundries’ most-recent non-infringement positions. *Id.*

## **II. APPLICABLE LAW**

When a party seeks to amend its infringement contentions, leave to amend is generally required and may only be granted upon a showing of good cause. P.R. 3-6(b). In determining good cause, courts consider (1) the reason for the delay and whether the party has been diligent; (2) the importance of what the court is excluding and the availability of lesser sanctions; (3) potential prejudice in allowing the amendment; and (4) the availability of a continuance to cure such prejudice. *Motion Games, LLC v. Nintendo Co.*, No. 6:12-CV-00878, 2015 WL 1774448, at \*2 (E.D. Tex. Apr. 16, 2015); *see also Keranos, LLC v. Silicon Storage Tech., Inc.*, 797 F.3d 1025, 1035 (Fed. Cir. 2015) (recognizing that the Eastern District of Texas considers these factors).

## **III. DISCUSSION**

### **A. Addition of Instrumentalities to Plaintiff's Infringement Contentions**

In its preliminary infringement contentions, KAIST identified the allegedly infringing products as “processor chips that are manufactured using Samsung FinFET Technology,” “processor chips manufactured using Globalfoundries’ FinFET Technologies,” and “Defendant Samsung’s Galaxy line of mobile devices.” Thus, the key question is whether this is a sufficient identification under P.R. 3-1 of the instrumentalities KAIST now seeks to add. The Court concludes it is, and will therefore grant the first part of KAIST’s motion to the extent KAIST seeks leave to identify allegedly infringing instrumentalities with more specificity.

Unlike contentions that attempt to “identify” allegedly infringing instrumentalities

by the functions they perform, *see, e.g., Alacritech Inc. v. CenturyLink, Inc.*, No. 2:16-CV-00693-JRG-RSP, 2017 WL 3007464, at \*3 (E.D. Tex. July 14, 2017) (rejecting the plaintiff’s attempt to “identify” structure based on the function that structure performs), KAIST’s contentions identify specific structure—processors and the Galaxy mobile devices—by the process from which the structures are made. That is sufficient if such identification is “as specific as possible” at the time the contentions were made. P.R. 3-1(b). While model designations of allegedly infringing instrumentalities should be included if known, the absence of such arbitrary labels is not, without more, fatal to a plaintiff’s infringement claim. *See id.* (requiring “the identification by name or model number, *if known*” (emphasis added)). Moreover, the Court is not aware of any *obligation* to supplement contentions to include additional identifying information once known, so if KAIST’s preliminary infringement contentions sufficiently identified the instrumentalities when served, they are sufficient now and the addition of more specific identifying information has no prejudicial effect.

The Court’s decision to grant leave is supported by three other considerations. First, Plaintiff’s infringement theory has not changed. Second, Defendants have never contended any of the “new” instrumentalities fall outside KAIST’s definition of allegedly infringing products or that Defendants do not understand what falls under KAIST’s definition. And third, KAIST asked Defendants for the model numbers, but Defendants responded by referring to 10,000 pages of documents rather than with a simple list. That’s not to say Defendants responded inappropriately, but a list likely would have been clearer and

expedited resolution of this issue.

Defendants make a number of other unpersuasive arguments. For example, Defendants argue that KAIST has failed to comply with the local patent rules by relying on a single chart for the Exynos 7420. Defs.’ Resp. [Dkt. # 210] at 4–6 Defendants analogize to the Court’s reasoning in *Alacritech*, but the *Alacritech* defendants proactively challenged the sufficiency of the contentions and noted why they believed additional charting was necessary. Here, however, Defendants did not raise the insufficiency of KAIST’s charting with the Court until KAIST indicated its intent to supplement.

Defendants also challenge the addition of mobile and third-party products as not reflecting the “smallest saleable unit” and as irrelevant because they are sold by third parties. Infringement contentions, however, are not the battleground for these disputes, which are best addressed with other motions.

Having concluded KAIST’s supplemental infringement contentions merely seek to add more specific identification of products already sufficiently identified by KAIST’s original contentions, the Court will grant this part of KAIST’s motion to the extent the “new” products are either (1) processor chips manufactured using Samsung’s or Globalfoundries’ FinFET technologies, or (2) Samsung’s Galaxy line of mobile devices.

## **B. Addition of Doctrine-of-Equivalents Contentions**

The second part of KAIST’s motion asks for leave to add doctrine-of-equivalents contentions for the requirements (1) that the Fin active region be “wall-shaped,” and (2) of a first oxide layer on the upper surface of the Fin active region with a thickness greater or

equal to that of the gate oxide. Pl.’s Mot. for Leave [Dkt. # 192] at 13–15. In KAIST’s view, the addition of these DOE contentions is necessitated by late deposition testimony from Defendants’ witnesses and late amendment by Defendants of their answer to KAIST’s Common Interrogatory No. 1. *Id.* Defendants respond that KAIST’s DOE contentions should have been articulated earlier in the case. Defs.’ Resp. [Dkt. # 210] at 12–14.

After considering the “good cause” factors, the Court concludes leave should be granted. For one, the Court did not compel Defendants to advance their non-infringement positions earlier, even though KAIST sought to do so. Order [Dkt. # 139]. Given that, the Court should not incentivize defendants from avoiding a response to a timely-served interrogatory for strategic reasons—such as to minimize the plaintiff’s time to react to the defendant’s non-infringement position once it crystalizes—yet denying this part of KAIST’s motion would do just that. And not surprisingly, other courts have granted leave to amend based on late-disclosed non-infringement positions. *See, e.g., Finjan, Inc. v. Symantec Corp.*, No. 14-CV-02998-HSG(JSC), 2017 WL 4025219, at \*2–3 (N.D. Cal. Sept. 13, 2017) (granting leave to add DOE contentions when the defendant supplemented its discovery responses with new technical descriptions and detailed assertions of its non-infringement positions); *Realtime Data v. Actian Corp.*, 6:15-CV-00463-RWS-JDL, 2016 WL 9340797 (E.D. Tex. Aug. 11, 2016) (allowing the addition of DOE theories based on discovery of the defendant’s non-infringement position). While Samsung notes KAIST knew aspects of its non-infringement position in late November 2017, the Court concludes KAIST was sufficiently diligent in moving for leave.



Second, Defendant will suffer little, if any, prejudice from the amendment. Notably, Defendants' response does not identify any specific prejudice it will suffer, except to note that discovery is closed and trial is near. *See* Defs.' Resp. [Dkt. # 210] at 14. The Court, however, anticipates KAIST's DOE contentions will require little, if any, additional preparatory work by Defendants.

#### **IV. CONCLUSION**

The Court **GRANTS** Plaintiff's Motion for Leave to Amend [Dkt. # 192]. Specifically, the Court **GRANTS** the motion as to the addition of instrumentalities that are either (1) processor chips manufactured using Samsung's or Globalfoundries' FinFET technologies, or (2) Samsung's Galaxy line of mobile devices. The Court also **GRANTS** KAIST's request to add the doctrine-of-equivalents theories to its infringement contentions.

**SIGNED this 16th day of April, 2018.**

  
ROY S. PAYNE  
UNITED STATES MAGISTRATE JUDGE